



ATTACHMENT A

Remarks

Claim 10 has been cancelled and rewritten in independent form as new claim 32. This amendment is not a substantive amendment, and places the application into better condition for allowance.

Rejection of Claims 1, 4 – 5, 9, 11 – 13 and 30 under 35 U.S.C. 102(b)

Claims 1, 4 – 5, 9, 11 – 13 and 30 have been rejected under 35 U.S.C. 102(b) as being anticipated by Paterson et al. (U.S. Patent 6,412,042) ("Paterson"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claim 1 recites a method of writing information to a storage device, including the step of writing information to both of two locations based on a single reading of the information, wherein one of the two locations is within a reserve area of the storage device, and wherein the reserve area is a protected area that is protected from access by a user.

The Paterson reference teaches "[a] data recording device including recording media having a set of at least two alternate regions thereon for each data segment, whereby each data segment has a corresponding set of at least two alternate regions on the recording media ..." (abstract). A processor retrieving a data segment selects one of the two regions from which to retrieve the data segment (col. 18, lines 31 – 33). If a read error occurs, the processor then attempts to retrieve the data segment from the other region (col. 18, lines 40 – 44).

It is alleged in the Office Action that Paterson teaches the method of claim 1, including writing information to both of two locations based on a single reading of the information, wherein one of the two locations is within a reserve area of the storage device, and wherein the reserve area is a protected area that is protected from access by a user in col. 11, line 60 to col. 12, line 20; col. 11, lines 15 – 25; and col. 18, lines 25 – 65 and et seq.

Col. 11, line 60 to col. 12, line 20 of Paterson, the first cited passage, describes the flowchart shown in FIG. 12 of the reference wherein a processor writes data from a data buffer to two disk sectors.

Col. 11, lines 15 – 25 discloses the use of an indicator bit that identifies a disk sector as having the “most recent copy” of a data segment.

Col. 18, lines 25 – 65 and et seq. describes the flowchart shown in FIG. 20 of the reference wherein a processor selects one of two disk sectors for retrieving data. The selection can be based on the shortest access time. The selected sector is read, and the processor determines if a read error occurred. If a read error has occurred, the data from the second disk sector is then read.

The Office Action characterizes the first cited passage as teaching “wherein one of the two locations is within a reserve area of the storage device (i.e., one of the two area stored data for future use, e.g., col. 11, line 60 to col. 12, line 20).” However, the passage does not contain a teaching or suggestion that one of the two disk sectors is within a reserve area or an “area for future use” of the data. Further, even if the passage did contain such a teaching regarding the future use of data written to one of the two disk sectors, the fact that one of the disk sectors is for future use cannot be read as a “reserve area of the storage device, wherein the reserve area is a protected area that is protected from access by a user” because an “area for future use” cannot be read as a “reserve area that is protected from access by a user.” Thus, it is respectfully submitted that the passage of col. 11, line 60 to col. 12, line 20 cannot be fairly characterized as teaching or suggesting writing information to two locations wherein one of the locations is within a “reserve area” of the storage device.

The Office Action characterizes other passages as disclosing that “the reserve area is a protected area that is protected from access by a host command (i.e., one of two areas is protected from retrieve data by host command until the other one has an error e.g., col. 11, lines 15 – 25; col. 18, lines 25 – 65) ...” However, these passages not only fail to teach or suggest writing information to two locations based on a single reading of the information, as recited in claim 1, but instead teach that the data segments stored in the two disk sectors may be from different points in time. Therefore, these passages teach different data segments from different points in time on two disk

sectors, and not the same information written to two locations based on a single reading of the information, as recited in claim 1.

Further, with respect to the characterization of these passages as disclosing a reserve area that is protected from access by a user, it is respectfully submitted that the passages teach that the disk sectors of the reference are not protected from access by a user and are, in fact, both accessible to the user in order to allow access to the second sector following a read error in reading data from the first sector. Thus, not only do the recited passages not contain a teaching or suggestion of the method recited in claim 1, but the recited passages actually teach away from the step of “writing information to both of two locations based on a single reading of the information, wherein one of the two locations is within a reserve area of the storage device, and wherein the reserve area is a protected area that is protected from access by a user.”

Claims 2, 4 – 5, 8 – 9 and 11 – 13 depend from claim 1 and are allowable for at least the reasons provided in support of the allowability of claim 1.

Claim 30 recites a method of writing information to a storage device including performing a single reading of information to be written into a read buffer, wherein the information to be read contains a header designating a dual write operation.

It is alleged in the Office Action that Patterson teaches “wherein the information to be read contains a header designating a dual write operation (i.e., a write command is a header of data segment, e.g., fig. 12, el. 140; col. 11, line 60 to col. 12, line 20); and a file system (e.g., col. 14, line 37).” Additionally, in response to the Applicant’s remarks in response to the prior Office Action, the current Office Action states that, “[t]he claimed language does not require the write command and the data segment to be transmitted at the same time; therefore, Paterson teaches the information to be read is the write command and the data segment of the information to be read contains a header designating a dual write operation (i.e., a write command is a header of a data segment, e.g., fig. 12, el. 140, col. 11, line 60 to col. 12, line 20.)”

First, with respect to the statement that “a write command is a header of a data segment” and the following citations, it is respectfully submitted that the cited passages do not teach “a write command is a header of a data segment.” Further, even if such a teaching was contained in the cited passages, the cited passages to not contain a

teaching or suggestion that “information to be read contains a header designating a dual write operation” as recited in claim 30 and discussed below.

FIG. 12 is a logical flowchart of the steps of an embodiment of a process for writing each data segment to data disks a multiplicity of times in a designated order (col. 5, lines 12 – 15). Element 140 is a step described as “host issues command to write data-segment.” This element is described in the passage at col. 11, line 60 to col. 12, line 20 as “the write process is initiated by the host 58 issuing a write command for writing the data segment 72 on the disk 22 (step 140).”

Neither FIG. 12, element 140 nor the cited passages contain a teaching or suggestion of “information to be read containing a header designating a dual write operation” because neither the figure nor the cited passages describes the “information to be read” at all. The fact that the host issues a command to write data segments is not a teaching or suggestion that the data segments contain a header designating a dual write operation. The write command of the Paterson reference is issued by the host. In response to the write command, a controller receives a data segment in a data buffer and writes the data segment in two disk sectors (col. 11, lines 53 – 61). Where the write command originates is not clear, but it is clear that it originates prior to the reading of the data segment, and, therefore, is not contained in the data segment as a header.

Second, turning to the comments in the Office Action that “the claim language does not require the write command and the data segment to be transmitted at the same time,” it is respectfully submitted that whether or not the claim requires “the write command and the data segment to be transmitted at the same time” is irrelevant to whether Patterson teaches or suggests that “information to be read contains a header designating a dual write operation.” As discussed above, the claim language requires the header designating a dual write operation to be a part of the information prior to being read. Reading the data segments of the Paterson reference as the “information to be read” of claim 30, the Paterson reference merely teaches receiving a data segment in a data buffer and writing the data segment to two disk sectors. It is respectfully submitted that the attempt to characterize the data segment as having a header designating a dual write operation is unsupported. There is no mention of a header designating a dual write operation.

Thus, it is respectfully submitted that the cited passages of the Patterson reference do not contain a teaching or suggestion of reading information to be written into a read buffer, wherein the information to be read contains a header designating a dual write option. Accordingly, claim 30 is allowable for at least this reason.

END REMARKS